

REMARKS

Claims 1, 3, 5, 6, 8-10 and 12 are pending. Claims 1, 5, 6 and 12 have been amended, and claims 4, 11 and 13-22 are canceled without prejudice to or disclaimer of the subject matter found therein.

This filing supplements the Request for Reconsideration filed March 24, 2005 and is in further response to the Office Action mailed January 26, 2005, and the Advisory Action mailed in response to Applicant's Request for Reconsideration.

On page 2 of the Office Action, claims 1-22 were rejected under 35 U.S.C. §102(b) as anticipated by Stern et al., U.S. Patent No. 5,755,715 (hereinafter "Stern"). As claims 2 and 7 were previously canceled and claims 4, 11 and 13-22 are canceled herein, the rejection with respect to those claims is moot. As to claims 1, 3, 5, 6, 8-10, and 12, the rejection is respectfully traversed.

Applicant's claim 1 calls for an apparatus for forming a lesion in body tissue, the apparatus comprising a probe adapted to contact body tissue, and having at least one electrode, at least one temperature sensor capable of measuring the temperature of the probe and generating signals representative of the temperature, and a controller comprising generation means for generating electromagnetic energy and supplying the energy to the at least one electrode, and control means for receiving the signals from the at least one temperature sensor and controlling the generation means such that the temperature of the probe is ramped up to a first equilibration temperature of between 90°C and 105°C, the temperature of the probe is held substantially constant at the equilibration temperature for a period of time to allow the temperature of different parts of the probe to equilibrate and the temperature of the probe is then increased to and maintained at a final steady state temperature of between 100°C and 115°C.

Claim 6 calls for a method of forming a lesion in body tissue comprising the steps of providing a probe capable of contacting body tissue to be treated, delivering electromagnetic

energy to the probe such as to raise the temperature of the tissue in contact with the probe, measuring the temperature of the probe, and controlling the delivery of the electromagnetic energy such that in an initial ramp-phase, the temperature of the probe is raised rapidly to a first threshold temperature of between 90°C and 105°C, in a second equilibrating phase, the temperature of the probe is held substantially constant for a period of time to allow the temperature of different parts of the probe to equilibrate, and in a subsequent treatment phase, the temperature of the probe is raised to a second, higher threshold temperature of between 100°C and 115°C such that a lesion is formed in the tissue adjacent the probe without the complete removal of electrolytes in the tissue adjacent to the probe through vaporization.

Stern discloses no such device or method.

The arguments presented in the Amendment filed November 9, 2004 and the Request for Reconsideration filed March 24, 2005 are incorporated herein as they remain applicable. However, Applicant has further amended claims 1 and 6 to specifically recite temperature ranges for the equilibration, or first threshold, temperature and the steady state, or second threshold, temperature. Stern does not disclose such temperature ranges. Further, Stern does not disclose the temperatures found in dependent claims 3, 5, 8 and 12 and, in fact, teaches away from such temperatures.

The Advisory Action mailed April 26, 2005 relies solely on Fig. 1 of Stern. Disregarding the entire written specification of Stern, the Advisory Action alleges that Fig. 1 teaches something that is completely contrary to the entire written description. It is difficult to understand how a drawing, that is in no way described as presented, can teach anything. This is particularly true when everything in the written description is directed to maintaining temperatures below 100°C. In point of fact, with the exception of cardiac ablation, where Stern believes the maximum temperature lies in a range between 80°C and 95°C, with a preferred representative value of about 90°C (col. 16, lines 29-30), Stern indicates that the ablation

temperature will preferably be 70°C (col. 10, line 11). That is, Stern teaches setting a temperature in a range of 50 to 90°C (col. 6, line 14; col. 10, line 10) for tissue ablation. Figs. 6A and 6B of Stern show how the temperature is obtained. In the figures, the temperature never exceeds approximately 83 or 84° (Fig. 6B). Further, Stern says nothing about a steady state temperature. Stern mentions a thermal mapping temperature in the range of about 43°C (Fig. 6B) on the way to the thermal ablation temperature of somewhere in the neighborhood of 83 or 84°C. There is nothing in the thermal mapping temperature that would allow a steady state to be achieved for the entire device prior to going to the ablation temperature as found in Applicant's claimed invention, that is, there is nothing in Stern that shows an equilibration, or first threshold, temperature between 90°C and 105°C where the temperature of the probe stabilizes before moving up to a final steady state, or a second threshold, temperature between 100°C and 115°C, the ablation temperature. In fact, Stern teaches ablation temperatures, except the upper limit of cardiac ablation, below Applicant's equilibration, or first threshold, temperature. Stern's preferred temperatures are below Applicant's equilibration, or first threshold, temperature except the Stern preferred cardiac ablation temperature equals Applicant's bottom equilibration, or first threshold, temperature, not Applicant's ablation temperature. Thus, Stern in all respects teaches away from Applicant's claimed invention. One may not ascribe to a reference that which is not taught when the teaching is specifically away from the claimed invention.

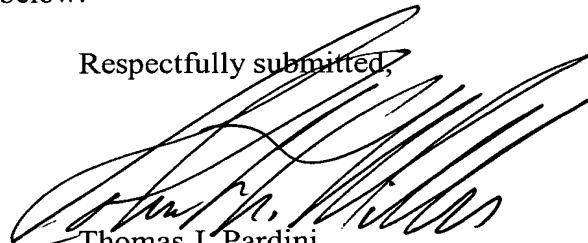
Further, Applicant's controller controlling the various temperatures is in fact a structural element and Stern specifically teaches his controller is set to meet lower temperatures. Although the physician may be permitted to set temperatures, at least for the final ablation temperature, the entire teaching reinforces what is discussed in Applicant's Background, that is, ablation temperatures above 100°C are destructive and do not provide the desired treatment affect.

Discussed in *In re Sponnoble*, 160 USPQ 237, at 243 (CCPA 1969) "[i]t should not be necessary for this Court to point out that a patentable invention may lie in the discovery of the source of a problem even though the remedy may be obvious once the source of the problem is identified. This is *part* of the "subject matter as a whole" which should always be considered in determining the obviousness of an invention . . . we must view the prior art without reading into that art Applicant's teachings . . . [t]he issue, then, is whether the teachings of the prior art would, *in and of themselves and without the benefits of Appellant's disclosure*, make the invention as a whole obvious." Stern clearly does not understand the problem as his disclosure is solely of the prior art and he clearly does not advance beyond that point. The fact that he has a figure that shows a maximum temperature of 120°C and a setting of 95°C, which is the maximum (cardiac) ablation temperature he discloses, does not show any understanding, motivation, or suggestion of Applicant's claimed invention, let alone any anticipation. Nowhere does Stern teach Applicant's temperature ranges in a device or a method as claimed. There is nothing in Stern that literally discloses the claimed invention which is a requirement for a rejection under 35 U.S.C. §102 and there is nothing in Stern that suggests the claimed invention. As such, the rejection is improper and it is respectfully requested it be withdrawn.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1, 3, 5, 6, 8-10 and 12 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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